graphical window as a function of the identified number, position and movement of the second element or the second plurality of elements contacting the second graphical window, displaying on the display device, upon manipulating the first graphical window, at least a third portion of the image within the manipulated first graphical window, and positions on the display device of common portions of the first and third portions of the image being substantially the same, and displaying on the display device, upon manipulating the second graphical window, at least a fourth portion of the image within the manipulated second graphical window, and positions on the display device of common portions of the second and fourth portions of the image being substantially the same.

[0046] In accordance with an additional system embodiment of the present invention, a multi-input display system comprises a display device for displaying on a display surface at least first and second graphical windows, for displaying a first portion of an image within the first graphical window, and for displaying a second portion of the image within the second graphical window, the first portion and the second portion representing at least portions of the same image, the display device adapted to detect one or more elements contacting the display surface, a controller adapted to identify a number, position and movement of a first element or a first plurality of elements contacting the displayed first graphical window, to identify a number, position and movement of a second element or a second plurality of elements contacting the displayed second graphical window, to manipulate the displayed first graphical window as a function of the identified number, position and movement of the first element or the first plurality of elements contacting the first graphical window, to manipulate the displayed second graphical window as a function of the identified number, position and movement of the second element or the second plurality of elements contacting the second graphical window, to control the display device to display on the display surface, upon manipulating the first graphical window, at least a third portion of the image within the manipulated first graphical window, positions on the display surface of common portions of the first and third portions of the image being substantially the same, and to control the display device to display on the display surface, upon manipulating the second graphical window, at least a fourth portion of the image within the manipulated second graphical window, positions on the display surface of common portions of the second and fourth portions of the image being substantially the same.

[0047] For the above-summarized additional method and system embodiments of the present invention, various aspects and features of such embodiments may be carried out in accordance with the present invention. Some of these features and aspects are summarized below.

[0048] As an aspect of such embodiments, the displayed first and second graphical windows have an overlapping region, and a part of the image displayed within the overlapping region represents at least a part of the first portion displayed within the first graphical window and also represents at least a part of the second portion displayed within the second graphical window.

[0049] As another aspect of such embodiments, the overlapping region is displayed with content having a predefined characteristic and non-overlapping region or regions of the first and second graphical windows are displayed with content not having the predefined characteristic.

[0050] As a further aspect of such embodiments, the image represents a map, a first portion of the map is displayed in the overlapping region at a first resolution and a second portion or portions of the map are displayed in a non-overlapping region (s)s at a second resolution, the first and second resolutions being substantially different.

[0051] As an additional aspect of the invention, the image represents a map, a first portion of the map having real time traffic data is displayed within the overlapping region, and a second portion or portions of the map not having real time traffic data are displayed within a non-overlapping region or regions of the first and second graphical windows.

[0052] As yet a further aspect of the invention, the image represents a photograph, a first portion of the photograph having an image enhancement characteristic is displayed within the overlapping region, and a second portion or portions of the map not having the image enhancement characteristic are displayed within a non-overlapping region or regions of the first and second graphical windows.

[0053] As yet another aspect of the invention, the image represents information containing hidden data, a first portion of the image is displayed within the overlapping region and at least a portion of the hidden data is revealed within the overlapping region, and a second portion or portions of the image are displayed within a non-overlapping region or regions of the first and second graphical windows and the non-overlapping region or regions do not reveal any of the hidden data.

[0054] As yet a further aspect of the invention, the first and second graphical windows are displayed with an overlapping region and respective non-overlapping regions. A portion of the image with a first characteristic is displayed within the overlapping region, a portion of the image with a second characteristic is display within the non-overlapping region of the displayed first graphical window, and a portion of the image with a third characteristic is display within the non-overlapping region of the displayed second graphical window. The first, second and third characteristics are different from one another.

[0055] As another aspect of the invention, the displayed first and second graphical windows have an overlapping region and at least the first graphical window has a non-overlapping region, and a part of the image displayed within the entire second graphical window is displayed in accordance with a predefined characteristic, and a part of the image displayed within the non-overlapping region of the first graphical window is displayed not in accordance with the predefined characteristic.

[0056] As a further aspect of the invention, at least the shape and/or size of both the first and second graphical windows are uniformly changed as a function of the position and movement of elements contacting both the first and second graphical windows.

[0057] As an additional aspect of the invention, portions of the image displayed within the manipulated first and second graphical windows are manipulated in a same manner the first and second graphical windows are changed.

[0058] Various other objects, advantages and features of the present invention will become readily apparent to those of ordinary skill in the art, and the novel features will be particularly pointed out in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0059] The following detailed description, given by way of example and not intended to limit the present invention solely